History of Fairbury's Water Supply System

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The Fairbury area is blessed to have a relatively high water table. In early Fairbury, every home had a well. These wells were typically only 18 to 55 feet deep. A hand pump was used to bring the water to the surface. Many homes had a hand pump in the kitchen, so buckets of water did not have to be carried in from a well in the yard.

Each Fairbury home also had a privy or outhouse. In addition to a privy, most homes had a cesspool also. A cesspool was just a hole dug in the ground where the homeowner could dispose of household waste. The problem with privies and cesspools was that waste could leak into the drinking water supply. This contaminated water was the cause of many deadly diseases.

On Locust Street, each block had a well with a hand pump. The hand pump could be used to fill a steel horse trough. Each pump also had an iron cup chained to it, which local citizens could use to get a drink.

Fairbury was plagued with many fires in the business district in the 1870s and 1880s. Five wood-lined cisterns were built along Locust Street to provide a water supply to fight fires. Each block of Locust Street had a cistern. Each reservoir held 240 barrels of water, or about 13,200 gallons. An underground pipe connected all five tanks. If a fire occurred, water would flow from all five cisterns to the one being tapped to fight the fire. The cistern system was supplied by a well using a windmill on the west end of Locust Street.

The cistern system proved to be inadequate to fight the many large fires that Fairbury had. In the winter, the connecting pipe between the cisterns would freeze and dramatically reduce the amount of water available.

In 1887, the City Fathers decided it was time to upgrade Fairbury's drinking water system significantly. The Fairbury Water Works facility was constructed at the northwest corner of First and Locust Streets. An open well was dug 25 feet deep with a 25-foot diameter. A wooden elevated water tank and tower were erected. A Smith-Vale steam pump was used to fill the water tower and pump the water to the customers. The water distribution system consisted of 3,300 feet of eight-inch diameter main pipes. The Water Works facility is shown on Fairbury's 1892 Sanborn Insurance Company map.

In her Fairbury history book, Stuffed Clubs & Antimacassars, Alma Lewis James recounted that all of the old residential wells in Fairbury were tested when they laid the new water mains in 1887. She reported that only two of the many wells tested were sewage-free.

Although Fairbury achieved a much-improved water supply for fighting fires, the local citizens complained about the foul-smelling sulfur odor and taste in the new water supply. Visitors to Fairbury drank copiously from the city faucets, under the impression that anything that tasted so evil must, of necessity, be powerfully medicinal.

After five years of complaints about the sulfur water, the City Council decided to replace the enormous dug well with a deep water drilled well in 1892. On the same site at the northwest corner of Locust and First Streets, a new 2,000-foot deep well was drilled.

Two new collecting reservoirs were built in 1898. The old elevated wood tank served until 1899, when a new wooden tank was built on a brick tower. In 1913, the wood tank was replaced by a new steel tank.

In 1914, the Illinois State Water Survey analyzed and created a report describing the current condition of the Fairbury drinking water system. This report noted that a small brick building was situated on top of the 2,000-foot-deep well. The main water pump was a 12x36 American steam head well pump with a six-inch discharge, rated at about 710,000 gallons per day. An additional steam-powered pump sent water to the reservoirs and distribution system. Two Atlas steam boilers were used to power the water pumps. Each boiler was 48 inches in diameter and 16 feet long. These boilers produced a steam pressure of 125 pounds per inch.

The first water plant, built in 1887, cost $16,500. Additional improvements brought the total cost up to $40,000 in 1914. This amount would be equivalent to $1.03 million in today's dollars.

In 1914, the City of Fairbury charged water users $4.00 per year if they had no water meter and just one faucet. Each additional faucet had a charge of $1.00 per year. Those customers with water meters paid $1.00 a quarter for a maximum usage of 3,000 gallons. Water usage above 3,000 gallons had a sliding scale cost of 15 to 30 cents per 1,000 gallons. A 1914 annual water bill of $4.00 would equal $103 in today's dollars. The 1914 water usage income from customers allowed the city to break even on its Water Works operation.

In 1916, a second well was drilled to a depth of 2,172 feet at the same location as the first one. In 1926, a third well was drilled to a depth of 1,586 feet.

By 1935, the original Water Works facility had been operating for 48 years and was obsolete. A new Water Works facility was built on south First Street between the fairgrounds and Indian Creek. Additional new wells were sunk at that location over the years.

In 1948, the water tower was replaced with a new steel tank and tower. In 1969, the Water Works facility on south First Street underwent a significant expansion. In 1996, the current water tower was erected.

After more than 130 years of operation, the Fairbury Water Department still produces high-quality water at a rate of over 500,000 gallons per day. Over the years, Fairbury Water Works has received many awards for providing exceptionally clean water.

1948 photograph showing new steel water tower and the old brick water it replaced at the northwest corner of First and Locust streets.